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ABSTRACT

The study presents descriptive data pertaining to the status of population education within the curricula of Florida's secondary schools. A four-page questionnaire, designed to obtain data from classroom teachers on a broad range of topics and areas pertaining to the status of population education within their respective schools, was mailed to 300 randomly selected Florida middle, junior high, and senior high schools. Responses received from 45.3 percent of the public and private school teachers indicated the following findings: (1) population education is included in schools regardless of the size of the school's enrollment; (2) classroom teachers are consciously incorporating population education content in a variety of elective and required courses; (3) there is a wide range of length of time spent by teachers on population education; (4) the majority of population education teachers are social studies teachers; (5) population education priority rankings suggest that population is primarily studied as an integral part of the examination of broader environmental problems and processes; (6) classroom teachers of population primarily teach units whose objectives are developed and written by the teachers themselves; (7) the majority of teachers indicated that they would attend a preschool or inservice population workshop if such were offered; and (8) the majority of teachers may not have received any college course preparation in the population education area. From these findings it appears that population education is included in school curricula. (Author/DDB)

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THE STATUS OF POPULATION EDUCATION IN FLORIDA SECONDARY SCHOOLS DURING 1973-1974: A FINAL REPORT

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S. Dennis Baker conducted the original survey in April, 1974. However, demands placed upon him by his teaching and graduate studies assignments prevented him from working with the returns. In the Spring, 1975, Robert J. Stahl was given the returns of the survey. The report that is presented herein has been the primary responsibility of Dr. Stahl since that time. Hence, this report is a joint effort of the two authors. Data not reported along some items is due to the fact that many of the returns were lost in the period after the original data cards were punched for data analysis. Only the 'additional comments' and written reponses to some items were lost.

THE STATUS OF POPULATION EDUCATION IN FLORIDA SECONDARY SCHOOLS DURING 1973-74: A FINAL REPORT

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THE STATUS OF POPULATION EDUCATION IN FLORIDA SECONDARY SCHOOLS DURING 1973-74: A FINAL REPORT

Introduction

Since the popular push for environmental awareness and protection in the mid-1960's, much has been reported on ways in which ecology and environment have been included as topics of study within the precollege curriculum. School curriculums, commercially- and governmentally-produced materials, locally developed resource units and the like have sought to sensitize students to and instill students with various principles of enviromental protection. Proponents of environmental studies have succeeded in many of their efforts to expand existing school programs towards including more ecological content and concepts. As one element of the total environmental studies program, population education has received widespread attention and acceptance within secondary school classrooms. Overpopulation, birth control, food shortages, abortion, growth rates, and mortality rates are but a few of the problems and topics related to this aspect of environmental education being studied in contemporary American classrooms.

Although content regarding population is being presented to students, little is known about the exact focus or extent of units which include this content. In other words, <u>what ought to be</u> the focus of population units and <u>what is</u> the focus may not be congruent. To paraphrase Viederman (1972), the study of population should serve a dual purpose: a) to develop an informed citizenry capable of understanding

population characteristics and processes as they affect society and capable of making responsible decisions with regard to public policy as it may affect and be affected by these processes; and b) to develop informed individuals who will use this knowledge and understanding to make responsible decisions regarding their own reproductive behavior. The outcome of the study of population should be the development within each individual student of responsible decision-making attitudes towards population-related problems and situations.

While these goals and objectives are noteworthy and critical to the survival of "Spaceship Earth," there is little data available to even suggest that classroom teachers of population units teach content and concepts related to these objectives. Indeed, we do not even know whether teachers stress objectives similar to those stated above. In short, the literature reports little information which actually describes the status of these units as they exist within the precollege curriculum. An in-depth examination of population units within the secondary schools of one state would shed some light on the nature of this subject matter area. The study reported in this article was a deliberate attempt to collect descriptive data pertaining to the status of population education within the curriculums of Florida's secondary schools.[1]

Method

In April, 1974, a four-page questionnaire accompanied by an introductory letter and a stamped, self-addressed envelope

was mailed to 300 randomly selected Florida middle, junior high, and senior high schools. The 23-item questionnaire was designed to obtain data from classroom teachers on a broad range of topics and areas pertaining to the status of population education within their respective schools. To ensure teacher response, the introductory letter requested each school principal to forward the questionnaire to a classroom teacher who taught population education units in their own courses. By June 1, 136 teachers from the 300 schools surveyed (45.3%) returned completed questionnaires. This article reports the responses of 136 classroom teachers who actually included population information within at least one course they taught.

Results[2]

Of the 136 teachers, 102 (75.1%) taught their population units in public secondary schools with Catholic parochial schools (20 responses or 14.7%), private non-religious schools (10 responses or 7.3%), and private religious schools (4 responses or 2.9%) following in that order. Together the 34 private schools represent 24.9 percent of the responses. This article reports and compares the responses of these 102 public and 34 private school teachers.

These teachers taught their population units in schools with different student enrollments and located in different urban-rural settings. Descriptive data related to these school characteristics are presented below.

Thirty-one of the 102 public school teachers (30.4%)

taught in schools with enrollments of between 501 and 1,000 students. Teachers in public schools with enrollments of from 1,001 to 1,500 students were second in number of responses (26 responses or 25.5%); of 1,501 to 2,500 students were third (23 responses or 22.5%); of more than 2,500 students, fourth (13 responses or 12,7%); of 251 to 500 students, fifth (5 responses or 4.9%); and, of less than 250 students, sixth (4 responses or 3.9%). In nearly the reverse order, 21 of the 34 private school teachers (63.6%) taught in schools with less than 250 students enrolled. Eight teachers (24.2%) taught in private schools with enrollments of between 251 and 500 students with three teachers (9.1%) in schools of much larger size, 1,001 to 1.500 students. One teacher taught in a private school with between 501 and 1,000 students enrolled. This variety of student enrollments for both public and private schools suggests population education is included in schools regardless of the size of the school's enrollment and that student enrollment does not operate to restrict the addition of this content within a school's curriculum. However, in part, these data may only reflect the differentiation existing in the sizes of Florida's public and private secondary schools rather than illustrate the 'typical' enrollment of schools which include population units.

Public school teachers in urban settings returned more questionnaires than did teachers from suburban or rural schools. Forty-two teachers (44.2%) of the 95 responding to this item

identified an urban setting for their school while 27 suburban (28.4%) and 26 rural (27.4%) teachers indicated these labels were appropriate tc describe the area served by their respective schools. Meanwhile, a majority of the private school teachers taught in suburban schools (19 teacher or 57.6%) with urban locations second in responses with 11 (33.3%) and rural locations third with only 3 responses (9.1%). Seven public and one private school teachers failed to identify the location of their schools. On initial review of these data, the conclusion might be drawn that population units were more frequently taught in urban public schools and suburban private schools. However, since data were not collected on schools from these settings which did not include such units, this conclusion should be considered with caution.

The respondents were asked whether population information was being included in primarily elective or required courses in their schools. Fifty-one of the 82 public school teachers responding to this item of the questionnaire (62.2%) indicated the required option. Twenty-four teachers (29.3%) marked the elective option while seven (8.5%) indicated such materials were studied in both elective and required courses. Nearly three-fourths of the private school teachers who marked this item, 18 of 25 teachers or 72 percent, indicated the required option while five (20.0%) marked the elective option. Two private school teachers (8.0%) selected the "both" choice. These findings suggest classroom teachers, regardless of the public-private status of their schools, were consciously incorporating population education content in a variety of courses within

their school's curriculums and were including this content within elective and required courses. For those interested in population education, the widespread inclusions of this content in required courses can only be good news.

Besides seeking information as to whether population information was included in elective or required courses, data also were sought as to the identification of the specific courses in the curriculum which contained this content. The questionnaire listed seven courses usually found in the secondary school curriculum and an "other" space respondents could use in order to identify additional courses which included population units. Of the seven specific courses listed, the 102 public school teachers indicated the following as the courses which contained population content: Contemporary Issues (37 responses or 36.3%), World History (33 responses of 32.4%), Biology and Marriage and the Family (each with 29 responses or 28.4%), Home Economics (28 responses or 27.5), the General Science and Problems of Democracy (each with 26 responses or 25.5%). Of the 34 private school teachers, Contemporary Issues received the most responses (15 or 44.1%), followed by Biology (13 responses or 38.2%), World History (12 responses or 35.3%), Problems of Democracy (6 responses or 17.6%), General Science and Marriage and the Family (each with 5 responses or 14.7%), and Home Economics (2 responses or 5.9%). Forty-nine public (48.0%) and thirteen private (38.2%) school teachers indicated "other" choices in addition to those listed in the questionnaire. Ten public school

teachers indicated Geography and Civics as other courses in their schools' curriculums which included population units with Sociology (9 responses) and 11th grade American History and general middle school social studies (7 responses each) the next most frequently indiciated "other" courses. Private school teachers listed general social studies, Geography, American History, and Religion first with three responses each. In addition, five public and two private schools taught separate courses entitled either Ecology or Environmental Science. In total, the seven originally designated courses were joined by 17 different "other" courses which included population education materials.

Except for the specific semester or year long courses in Ecology or Environmental Science, the population education units these teachers taught were included in various courses they taught and these units varied in their length as well. Thirty-six of 78 public school teachers (46.2%) identified the lengths of these units as being one week. The next most popular length for these units was 'less than a week' (13 responses or 16.7%), with one month (8 responses or 10.3%), nine weeks (6 responses or 7.7%), and one day (5 responses or 6.4%) following in that order. Seven of these teachers stated the lengths of these units varied since population education information was included when, where, and as appropriate to their regular courses of study. Less-than-one-week units were the most popular among the private school teachers (6 responses or 27.3%) with the

other lengths following closely behind in the frequency of use: one week units (5 responses or 22.7%), one month units (3 responses or 13.6%), and one day units and nine week units (each with 2 responses ro 4.5%). Among the "other" lengths listed by the 14 teachers who checked this option were included units two-and-a-half, three, and twelve weeks in length as well as individualized learning packets.

Considering the fact that nearly all of these teachers taught courses not directly related to population education, the diversity of lengths for these units as illustrated above is not unusual. These data indicate these teachers were making concerted efforts to at least introduce population concepts and materials to students in forms as varied as individualized packets to instructional units 12 weeks in length. However, reading between the lines of these figures, the most accurate description of the length of population units may be as long as need be and where and when appropriate within the scope of regular courses taught by teachers.

Data presented earlier suggested that the majority of these population units were included for various lengths of time primarily within social studies courses taught at the respective schools of these respondents. Additional support towards the verification of this conjecture was found upon analysis of the results of the data regarding the respondents' identification of the department or departments in their schools they <u>expected</u> to find population education units taught.

Ninety-seven of the 102 public school teachers (95.1%) reported they expected to find the Social Studies department in their schools teaching population content and information. A distant second place position was filled by the Science department (54 responses or 52.9%), with Home Economics third with 44 responses (43.1%), Health Education fourth with 30 responses (29.4%), and Physical Education fifth with 8 responses (7.8%). Although they had indicated "other" departments in their school were expected to include such content, fourteen respondents (13.7%) failed to specify a department. Among private school teahcers, 31 of the 34 respondents (91.2%) indicated the Social Studies department first with the Science department again a distant second place finisher with a mere 14 responses (41.2%). Home Economics, Health Education, and Physical Education followed in that order with 4,3, and 2 responses respectively. Eight of the 11 private school teachers who indicated "other" departments failed to specify a department. In sum, 128 of the 136 teachers (94.1%) who responded to this questionnaire indicated their expectation that the Social Studies department in their schools included population units in their regular course offerings. At the same time, only one-half of these teachers (68 responses or 50.0%) expected these units to be included in Science department courses with barely a third (35.3%) suggesting the Home Economics department taught this content. Interestingly, these teachers did reveal their expectations (or hopes) that their schools'

language arts, pre-vocational education, career education, and religion departments (4,3,2, and 2 responses respectively) included such content. Why science courses were not expected to include population content and materials was not revealed by this questionnaire.

In analyzing the responses of these teachers, these data revealed that not only did teachers expect population information to be taught in a variety of courses and departments in their schools, but that this information was in fact being included in courses taught in several different departments. These findings lend support for the earlier speculation that schools and teachers are making an effort to at least introduce students to population concepts and information and that this effort is not restricted to elective, social studies, or semester or year long courses. Furthermore, these data suggest schools are focusing their efforts to include these units in numerous courses within their curriculums and are not restricting these units to any specific length of time. However, these findings do reveal that these units are found most often within regular social studies courses and are expected to be found there. Indeed, these data revealed that the majority of population education teachers are social studies teachers. One may speculate that administrators and teachers perceive population as a social science rather than a science subject matter area. If this is the case, then one wonders whether students enrolled in population-oriented units are acquiring an adequate understanding of the basic scientific

content and concepts needed to understand the literature or to solve problems related to population.

The respondents were asked to identify the objectives they set for the population units they taught (See Table I). Ten objectives commonly cited for units on the secondary school level were listed in the questionnaire for the

Table I about here

convenience of the respondents. Each teacher could select any number of objectives from those listed which were appropriate for their own units. The item also included an invitation for the respondents to write-in additional objectives not listed on the survey form. A number of the 134 teachers who responded to this item marked several objectives as being appropriate.

The three top-ranked objectives cited by the public school teachers were: a) studying population as one aspect of the whole environmental crisis situation (74 responses or 73.3%); b) identifying and examining characteristics of past, present, and future population growth (66 responses or 65.3%); and c) identifying and exploring the possible consequences of continued population growth (64 responses or 63.4%). The private school teachers ranked these same three objectives first, third, and fourth respectively. The second choice among the private school teachers was the objective to draw inferences and formulate hypothesis about human population growth (16 responses or 48.5%). The close agreement between these two groups of teachers was maintained

throughout the entire set of objectives ($r = .94$, $p<.01$). Among the more clearly stated "other" objectives these teachers set were: to examine the world of work in a changing population; to examine changing choices for working and contributing economically and culturally; to assist students in clarifying their values in regard to population-related issues; and, to assist each student in recognizing himself as an individual and accept his responsibility as an individual within a population group. Five teachers (3.7%) indicated that none of the ten objectives listed reflected those used by them in planning and teaching their population units. However, not one of these five listed an objective they did set.

In reviewing the priorities assigned to these population education unit objectives, the rankings suggest that population was primarily studied as an integral part of the examination of broader environmental problems and processes. The approach stressed by the highest ranked objectives may best be described as a historical and consequential analysis of population-related problems. However, after examining the four least supported objectives these teachers appear to have expected students to analyze population and environmental problems and data without having first acquired the conceptual tools needed to do the job adequately. Furthermore, these teachers appear to have de-emphasized student participation in helping solve environmental problems as if to infer their students were incapable of doing anything

positive to help resolve population-related problems or that it is too late to do anything about these problems. Finally, the ratings assigned these objectives suggest that teachers and students may spend a great deal more time 'talking about' population-related content problems than they do 'studying' population phenomena. Support for this interpretation came from several of the teachers. One stated that "population education is important so long as it is placed in a logical perspective, e.g., to include refraining from the people on top of each other myth being exposed as 'just around the corner.'"

Two other questions related to instructional objectives for population units were included in the questionnaire. The respondents were asked if instructional objectives had been developed for these units by their school and if they had used these objectives within the scope of their own units. Ninety-one public (91.0%) and 24 private (70.6%) school teachers reported their schools had listed such objectives for this area of the curriculum. Despite this large number, only 12 public and 9 private school teachers indicated they used these objectives in courses they themselves taught. Apparently these teachers saw these school-set objectives as being too confining or inappropriate or of too little value to their own units for them to adapt or adopt them for their own course use. Thus, if these data are representative, it would appear classroom teachers of population primarily teach units whose objectives are developed and written by

the teacher themselves rather than are the results of adopting objectives listed by their school (or county). If this is the case, one wonders what value the establishment of such objectives by environmentalist groups would have in shaping the content and scope of population units as they are taught within the secondary school curriculum. These data suggest they would have no value.

In an effort to gain further information pertaining to the specific content and topics included within the population units taught by these teachers, a list of 17 topics and concepts generally accepted as being relevant to the study of population was included in the questionnaire (See Table II). The respondents were requested to check all of those topics and concepts which they discussed and studied in their classrooms. These teachers were also invited to add other topics not already listed but which were studied

Table II about here

within these units. The topics and concepts most covered by the public school teachers were: a) the effects of crowding (70 responses or 70.0%); b) population and environment (66 responses or 66.0%); and, c) the birth rate, Florida's population, growth rates, and the population explosion (each with 63 responses or 63.0%). The topics of immigration, the birth rate, and the effects of crowding tied for first place among the private school teachers with 21 responses each (61.8%). These three topics were followed in frequency of study by the topics population and environment (19 responses

or 55.9%), the census (18 responses or 52.9%), and growth rates (17 responses or 50.0%). When the responses of both groups of teachers were combined, the effects of crowding (91 responses); population and environment (85 responses), and the birth rates (84 responses) were ranked one, two and three respectively.

These teachers also tended to agree on the concepts and topics they least studied in their courses. The three topics least studied in public school population units were geometric growth and sex-role stereotyping (each with 24 responses or 24.0%) and demographic transition (32 responses or 32.0%). Private school teachers ranked geometric growth (6 responses or 17.6%), age structure (9 responses or 26.5%), and demographic transition (10 responses or 29.4%) 17th, 16th, and 15th, respectively. As with the objectives listed for these units, these two groups of teachers strongly agree on the level of priority to assign each of the topics and concepts listed ($r = .82$, $p<.01$).

Some teachers responded to the invitation to identify other topics they included in their courses. An analysis of their responses identified these topics: death rate data (3 responses), city/urban planning (3 responses, and family planning, life expectancy and the effects on ecology (1 response each). Of special interest were comments made by these teachers in response to the 'birth control' option for this item. One teacher said she taught birth control 'very tactfully.' Two others indicated they taught birth

control subject matter as an 'issue' rather than as a focus of instruction.

These Florida teachers reported they would like to see a number of different types of instructional resources and aids relating to population made available to them for their use (See Table III). These teachers indicated the specific forms of materials and aids they desired as well as listed 'other' materials they would find useful for their

Table III about here

teaching of population content. The resources most wanted by public school teachers were: a) filmstrips (70 responses or 70.0%0; b) student workbooks (68 responses or 68.0%); and, c) cassette tapes (61 responses or 61.0%). In a slightly different order, the private school teacher selected these same three as their top choices: a) student workbooks (16 responses or 48.5%0; b) filmstrips (14 responses or 42.5%); and, c) cassette tapes (13 responses or 39.4%). While both groups agreed on their least preferred type of instructional aid, bibliographies (14 and 2 responses for public and private school teachers respectively), they disagreed as to their next two least preferred choices. Public school teachers identified 35mm slides (21 responses or 21.0%) and textbooks (24 responses or 24.0%) for these two near-bottom ranked positions while the private school teachers listed transparencies (4 responses or 12.1%) and super-8 filmloops (5 responses or 15.2%) in these two positions. Only one teacher identified another aid not listed among the choices

provided. This teacher desired more population films on television so that the school could record them on videotape for later replay. However, the desire for materials must be put into its proper perspective. Some schools still censure population-related materials. One teacher stated that my county "is very conservative--to the point where the media center won't purchase or order Tragedy of the Commons." Should inexpensive or free materials be sent to teachers, there is no guarantee they will be used correctly. Finally, much of the failure of the so-called 'curriculum revoluation' of the 1960's was due to the inadequate preparation classroom teachers had received in the content and methodology necessary to handle these new materials. It may be more effective to identify a few teachers, provide them with the content background and conceptual understanding, teach them the methodologies, and then make available population materials to individuals who will then possess the skills needed to use these materials effectively.

The possibility of offering population workshops as part of pre-school or inservice workshops, summer institutes, and short courses is great. The fact that 96 public and 27 private school teachers have already attended such workshops attests to their widespread use as vehicles for providing this instruction. Only 11 teachers (8.2%) indicated they had not already attended some type of population education workshop.

When asked if they would attend a population workshop should the opportunity become available to them, 86 public

(84.3%) and 27 private (84.4%) school teachers responded with a "yes" answer. Of the 136 teachers, only 21 stated definitely they would not attend such a workshop. These data indicate that teachers in both public and private school settings are equally enthusiastic about learning more about population principles and concepts. They report they have attended workshops in the past related to this area and, if given the opportunity, would again attend such workshops. That such an attitude exists among these teachers must be encouraging news to those concerned with improving the quality of this subject matter area.

The role of and need for these workshops becomes even more apparent when one realizes that 70 of these teachers never had taken a course in college which stressed the study of population or population-related material. Fifty-four of the 68 public school teachers (79.4%) and 16 of the 24 private school teachers (66.7%) responding to this item clearly stated they had had no such courses in their college preparation. Thirty-nine more teachers (32.4% of 136 teachers) did not respond to this item. These responses may be interpreted to mean that 39 teachers in addition to the 70 teachers identified earlier may not have received any college course preparation in this content area. If this is a correct interpretation, then 109 of the 136 teachers who taught population education units in Florida secondary schools had never completed a single course in college related to the subject matter they were teaching. Eight public (11.8%) and four private (16.7%) school

teachers reported they had completed two college courses stressing population with five public and two private school teachers having completed one course each. One private school teacher reported having taken two courses while another indicated having completed eight courses related to this content area. In summary, these data suggest that in general these teachers were not adequately prepared to teach the subject matter they have been asked to include or chose to include within their regular courses. However, one should not equate the number of college courses taken with the extent of knowledge an individual may possess relative to any given field of study. In addition, since most environmental courses on the college level are relatively recent entries into the college curriculum, many of these teachers did not have the opportunity to enroll into these courses during their college preparation programs. One of the reasons these teachers were so willing to attend inservice workshops appears obvious from these data. These teachers recognized they lacked the knowledge of population education content to do an effective job in their own classrooms. They have admitted their desire to attend workshops to enhance their skills and knowledge in this area. The stage is set for some individual or group to begin the work these teachers have indicated needs to be done.

The preference for more inservice education is especially significant in light of the responses revealing 92 public

(92.0%) and 27 private (79.4%) school teachers considered it important to include population content within the secondary school curriculum. Interestingly, despite the fact they taught such content, 15 teachers indicated they did not think population information was important to the curriculum.

Summary and Conclusions

Among the more important findings relative to the status of population education in Florida are the following:

a) classroom teachers in a wide variety of subject areas included population content and units within their regular courses;

b) the units taught by these teachers stressed different objectives, content, and concepts;

c) the units taught by public and private school teachers were very similar in objectives, content, and concepts stressed;

d) the units varied in length;

e) social studies teachers were expected to and, in fact, did teach a majority of the units on population education;

f) population education teachers desired more instructional aids and inservice workshops to help them improve their courses; and,

g) a vast majority of the teachers had taken no formal college course which focused on population content.

From these findings it would appear that proponents of population education have had an impact on shaping school curriculums.

Teachers from 136 of the 300 Florida secondary schools surveyed took time to complete and return the questionnaire. How many of the remaining 164 schools surveyed which did not return the questionnaire also included population units within their curriculums is unknown. It is doubtful all of these schools ignored the study of population content and problems.

While individuals varied among themselves in terms of their population education instructional units, the survey data revealed a tremendous similarity betweed public and private school teachers (as a group) and their population units (when taken collectively). The significant correlations (p .01) between these two groups of teachers for course objectives, course content, and desired a-v aids serve to indicate the degree of this similarity. Considering the differences among and between public and private schools in terms of student enrollments, available money, and clientele, this level of agreement across all three areas of comparison was unexpected. These results suggest that regardless of where individuals are employed as teachers, they teach the same content and have many of the same needs. In the area of population education whether these teachers agreed because of their previous workshop experiences or as a result of being subjected to similar stimuli from television, books, and popular magazines is not known. Hence, their agreement may merely reflect the power of the mass media to influence different individuals in much the same way.

An alternative explanation would be to suggest these

teachers included population education content in their courses because they personally believed this information was important rather than included it because this material was part of their school's or county's curriculum plan. The data relative to the infrequent use of the school's formal curriculum plan and objectives would support this interpretation. The findings reported earlied regarding the belief in the importance of studying population material on this level would also support this conjecture.

Hence, the nature of population education units may be based entirely on the personal interests and concerns of the teachers who include this information in their own courses as this subject comes up in class or within much broader units relative to pollution, conservation, contemporary issues, and the like. Should this be the case, individuals and groups trying to influence the curriculums of schools in directions more consistent with population education goals may find their efforts more rewarding if they sought to interest teachers as individuals rather than as teachers. This survey would suggest that such an approach would more directly influence teachers towards including this content within their courses than any other approach they may take. Thus, population workshops aimed at teachers as individuals rather than as teachers per se may be the most effective types of workshops to hold. To influence curriculum planners does not guarantee the acceptance of these objectives or the inclusion of this material within the classroom. The teachers, not the curriculum plan, are the ones

who must be influenced.

Finally, one other factor which may be overlooked in terms of the nature of the study of various population concepts and content must be considered. To study population primarily within social studies classes without providing students with the conceptual understanding of important scientific and technical terms run the risk of having students use the vocabulary of population education without understanding what these terms mean. Students with only a casual knowledge of various population-related terms and issues acquired from an instructor's general understanding of these terms and issues may develop even more stereotyped impressions, have even less understanding of the material and problems, or consider decisions based upon more misinformation or less accurate interpretations of relevant data. Students may develop unwarranted fears or make assumptions based upon misunderstood information, e.g., the people piled on top of each other myth mentioned earlier. Units which leave students with this level of knowledge are not what is needed. Units whose intentions are noteworthy but upon implementation foster more uncertainty and confusion surrounding population phenomenon must be avoided. The study of population issues does not guarantee that the data and terms are being understood by students. Even more, such a study does not reveal how accurate the data are or how appropriate the data are to the issue being studied. Groups which desire to have population information studied in

schools must be careful as to how these units are taught as well as what the results of such units are on students' knowledge and understanding.

In conclusion, population education has "come a long way baby" in the past few years. Let's hope that population units have not been 'misconceived' in origin or poorly implemented in practice. Teachers are notorious for not keeping up with the literature in their own content area field. Since this is the case, we cannot expect teachers to have become experts in population-related content. Nor can we assume that their personal interests in problems related to this area of environmental education have made them knowledgeable on this particular subject area. Two of the films most shown by the 136 teachers answering this questionniare did not exist and hence were unavailable to be shown. Yet, eleven teachers reported they had shown these films to their students during population education units. If teachers are capable of showing non-existent movies, just think what might occur as they engage in the teaching of birth control, aging, or other important population concepts and problems. We must be careful not to assume that because population information is included within a course that it is being presented adequately and that students are understanding this information. We do not know whether students <u>understand</u> how this information could be used to help them make decisions regarding their personal reproductive behavior. In short, this survey reported the quantitative nature of population education in Florida schools. The reader is cautioned not

to equate quantity with quality. To make such an assumption is not warranted by these data.[3]

FOOTNOTES

1. For the purposes of this study, population education was defined as learning to identify changing population phenomena and to recognize their many implications. This definition was included at the bottom of the questionnaire form sent to the teachers.
2. The percentages reported herein were computed in terms of the number of teachers who responded to the item rather than in terms of all possible respondents regardless of their attempts to respond to the particular item being discussed.
3. The survey reported herein was conducted under the auspices of P. K. Yonge Laboratory School, Gainesville, Florida 32611.

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Table I

The Objectives the Public and Private School Teachers Set For Their Population Education Units*

Objectives	Public School Teachers F	%	R	Private School Teachers F	%	R
Studying population as one aspect of the whole environmental crisis situation	74	73.3	1	17	51.5	1
Identifying and examining characteristics of past, present and future population growth	66	65.3	2	15	45.5	3
Identifying and exploring the possible consequences of continued population growth	64	63.4	3	14	42.4	4
Drawing inferences and formulating hypotheses about human population growth	58	57.4	4	16	48.5	2
Studying the effects of crowded conditions on individual personality and group behavior	56	55.4	5	12	36.4	5
Reading and interpreting population data presented in different forms such as statistics, graphs, etc.	54	53.5	6	10	30.3	6
Identifying and examining the students' role in the population problem	44	43.6	7	8	24.2	8.5
Studying the effects of population growth on internal and international politics, economics, etc.	43	42.6	8	9	27.3	7
Defining basic demographic terms	39	38.6	9	8	24.2	8.5
Examining various actions through which inidividuals can influence population changes	38	37.6	10	6	18.2	10

*Percentages based on the 101 public and 33 private school teachers who responded to this item of the questionnaire.

$r = .94$ ($p < .01$)

Table II

The Topics and Concepts Included by the Public and Private School Teachers in Their Own Classroom Units*

Topic or Concept	Public School Teachers F	%	R	Private School Teachers F	%	R
Effects of crowding	70	70.0	1	21	61.8	2
Population and environment	66	66.0	2	19	55.9	4
Birth rate	63	63.0	4.5	21	61.8	2
Growth rate	63	63.0	4.5	17	50.0	6
Population explosion	63	63.0	4.5	16	47.1	7.5
Florida's population	63	63.0	4.5	15	44.1	9
Population and economics	60	60.0	7	16	47.1	7.5
Immigration	58	58.0	8.5	21	61.8	2
Population distribution	58	58.0	8.5	13	38.2	12
Census	56	56.0	10.5	18	52.9	5
Population projections	56	56.0	10.5	14	41.2	10
Zero population growth	49	49.0	12	13	38.2	12
Age structure	41	41.0	13	9	26.5	16
Birth control	38	38.0	14	13	38.2	12
Demographic transition	32	32.0	15	10	29.4	15
Sex-role stereotyping	24	24.0	16.5	11	32.4	14
Geometric growth	24	24.0	16.5	6	17.6	17

*Percentages based on the 100 public and 34 private school teachers who responded to this item of the questionnaire.

$r = .82$ ($p<.01$)

Table III

The Types of Instructional Resources Desired by These Public and Private School Teachers*

Type of Instructional Resource	Public School Teachers F	%	R	Private School Teachers F	%	R
Filmstrips	70	70.0	1	14	42.4	2
Student workbooks	68	68.0	2	16	48.5	1
Cassette tapes	61	61.0	3	13	39.4	3
Super-8 filmloops	56	56.0	4	5	15.2	15
Visiting lecturers	45	45.0	5	11	33.3	7.5
Films	38	38.0	6.5	12	36.4	5
Simulation games	38	38.0	6.5	11	33.3	7.5
Materials for slow learners	37	37.0	8.5	8	24.2	10.5
Value sheets	37	37.0	8.5	6	18.2	13.5
Case studies	34	34.0	10	12	36.4	5
Small paperbacks	33	33.0	11	12	36.4	5
Posters	29	29.0	12.5	7	21.2	12
Transparencies	29	29.0	12.5	4	12.1	16
Newsletter for teachers	28	28.0	14	6	18.2	13.5
Textbooks	24	24.0	15	8	24.2	10.5
35mm slides	21	21.0	16	10	30.3	9
Bibliographies	14	14.0	17	2	6.1	17

*Percentages based on the 100 public and 33 private school teachers who responded to this item of the questionnaire.

$r = .63$ ($p<.01$)

APPENDIX A

TABLES

Item number on the questionnaire: 3

Item: Indicate the size of the school's enrollment (Grades 5 and above)

Choices Provided The Respondents	Public School F	Public School %	Non-Catholic Private School F	Non-Catholic Private School %	Catholic Private School F	Catholic Private School %	Total All-Respondents F	Total All-Respondents %
A). Less than 250 students	4	3.9	8	61.5	13	65.0	25	18.5
B). 251 to 500 students	5	4.9	3	23.0	5	25.0	13	9.6
C). 501 to 1,000 students	31	30.3	1	7.7	0	0.0	32	23.7
D). 1,001 to 1,500 students	26	25.4	1	7.7	2	10.0	29	21.5
E). 1,501 to 2,500 students	23	22.5	0	0.0	0	0.0	23	17.0
F). More than 2,500 students	13	12.7	0	0.0	0	0.0	13	9.6
No Responses	0	----	1	----	0	----	1	----
Totals	102	99.7	14	99.9	20	100.0	136	99.9

Item number on the questionnaire: 4

Item: Indicate the most appropriate description of the area served by your school

Choices Provided the Respondents	Public School F	Public School %	Non-Catholic Private School F	Non-Catholic Private School %	Catholic Private School F	Catholic Private School %	Total All-Respondents F	Total All-Respondents %
A). Urban	42	44.2	4	30.8	7	35.0	53	41.4
B). Rural	26	27.4	0	0.0	3	15.0	29	22.7
C). Suburban	27	28.4	9	69.2	10	50.0	46	35.9
No Responses	7	----	1	----	0	----	8	----
Totals	102	100.0	14	100.0	20	100.0	136	100.0

Item number on the questionnaire: 6

Item: In which of the following courses at your school are aspects of population education included:

Choices Provided the Respondents	Public School F	Public School %	Non-Catholic Private School F	Non-Catholic Private School %	Catholic Private School F	Catholic Private School %	Total All-Respondents F	Total All-Respondents %
A). Contemporary Issues	37	36.3	7	50.0	8	40.0	52	38.2
B). World History	33	32.4	4	28.6	8	40.0	45	33.1
C). Biology	29	28.4	6	42.9	7	35.0	42	30.9
D). Marriage and the Family	29	28.4	2	14.3	3	15.0	34	25.0
E). Problems of Democracy	26	25.5	3	21.4	3	15.0	32	23.5
F). General Science	26	25.5	0	0.0	5	25.0	31	22.8
G). Home Economics	28	27.5	1	7.1	1	5.0	30	22.1
H). Other	49	48.0	5	35.7	8	40.0	62	45.6
Totals(Not Appropriate)								

Item number on the questionnaire: 6 continued

"Other" Courses Identified as Containing Population Education Content	Public School F	Non-Catholic Private School F	Catholic Private School F	Total All-Respondents F
a) Geography	10	1	2	13
b) Civics	10	1	1	12
c) General Middle School Social Studies	8	2	1	11
d) 11th Grade American History	8	2	1	11
e) Sociology	9	0	0	9
f) Ecology/Environmental Science	5	1	1	7
g) Health	5	0	0	5
h) Psychology	4	0	0	4
i) American Institutions	3	0	0	3
j) Economic Studies	3	0	0	3
k) Religion	0	0	3	3
l) Florida History	2	0	0	2
m) Language Arts	2	0	0	2
n) Changing Cities	1	0	0	1
o) Conservation	1	0	0	1
p) Earth Science	0	0	1	1
q) Man and His World	0	0	1	1
Totals	71	7	11	89*

*A number of respondents designated more than one 'other' response for this item.

Item number on the questionnaire: 7

Item: In which department in your school would you expect population education to be taught?

Choices Provided the Respondent	Public School F	Public School %	Non-Catholic Private School F	Non-Catholic Private School %	Catholic Private School F	Catholic Private School %	Total All-Respondents F	Total All-Respondents %
A). Social Studies	97	95.1	11	78.6	20	100.0	128	94.1
B). Science	54	52.9	7	50.0	7	35.0	68	50.0
C). Home Economics	44	43.1	1	7.1	3	15.0	48	35.3
D). Health Education	30	29.4	1	7.1	2	10.0	33	24.3
E). Physical Education	8	7.8	1	7.1	1	5.0	10	7.4
F). Other (specify)	22	21.6	3	21.4	8	40.0	33	24.3
a) Language Arts	3	2.9	0	0.0	1	5.0	4	2.9
b) Pre-Vocational Education	3	2.9	0	0.0	0	0.0	3	2.2
c) Career Education	2	2.0	0	0.0	0	0.0	2	1.5
d) Religion	0	0.0	0	0.0	2	10.0	2	1.5
e) Failed to specify	14	13.7	3	21.4	5	25.0	22	16.2
Totals (Not Appropriate)								

Item number on the questionnaire: 8

Item: If you have included population education concepts into the course(s) you are presently teaching, please indicate the approximate length of time spent on the topic.

Choices Provided the Respondents	Public School F	Public School %	Non-Catholic Private School F	Non-Catholic Private School %	Catholic Private School F	Catholic Private School %	Total All-Respondents F	Total All-Respondents %
A). One week	36	46.2	3	33.3	2	15.4	41	41.0
B). Less than one week	13	16.7	1	11.1	5	38.5	19	19.0
C). One month	8	10.3	1	11.1	2	15.4	11	11.0
D). Nine weeks	6	7.7	0	0.0	2	15.4	8	8.0
E). One day	5	6.4	1	11.1	1	7.7	7	7.0
F). Other (specify)	10	12.8	3	33.3	1	7.7	14	14.0
a) Varies(i.e., is included when and where appropriate)							7*	----
b) Three weeks							4*	----
c) Twelve weeks							2*	----
d) Individualized learning packets							2*	----
e) Two-and-a-half weeks							1*	----
No Responses	24	----	5	----	7	----	36	----
Totals	102	100.1	14	99.9	20	100.1	136	100.0

*Not included in total count.

Item number on the questionnaire: 9

Item: Is population education included in primarily elective or required courses in your school?

Choices Provided the Respondents	Public School F	Public School %	Non-Catholic Private School F	Non-Catholic Private School %	Catholic Private School F	Catholic Private School %	Total All-Respondents F	Total All-Respondents %
A). Elective Courses	24	29.3	3	37.5	2	11.8	29	27.1
B). Required Courses	51	62.2	5	62.5	13	76.5	69	64.5
C) Both Elective and Required Courses*	7	8.5	0	0.0	2	11.8	9	8.4
No Responses	20	----	6	----	3	----	29	----
Totals	102	100.0	14	100.0	20	100.1	136	100.0

*This category of response was added after the 9 teachers designated this as their choice. This category designation was not included on the questionnaire form. It was added while tabulating the responses.

Item number on the questionnaire: 13

Item: Below are listed a number of topics and concepts which are usually included in the study of population. Please indicate those topics and concepts which are discussed in your classroom.

Choices Provided the Respondents	Public School F	Public School %	Non-Catholic Private School F	Non-Catholic Private School %	Catholic Private School F	Catholic Private School %	Total All-Respondents F	Total All-Respondents %
A). Effects of crowding	70	70.0	9	64.3	12	60.0	91	67.9
B). Population and environment	66	66.0	5	35.7	14	70.0	85	63.4
C). Birth rate	63	63.0	10	71.4	11	55.0	84	62.8
D). Growth rate	63	63.0	9	64.3	8	40.0	80	59.7
E). Immigration	58	58.0	8	57.1	13	65.0	79	59.0
F). Population explosion	63	63.0	7	50.0	9	45.0	79	59.0
G). Florida's population	63	63.0	6	42.9	9	45.0	78	58.2
H). Population and economics	60	60.0	5	35.7	11	55.0	76	56.7
I). Census	56	56.0	6	42.9	12	60.0	74	55.2
J). Population distribution	58	58.0	7	50.0	6	30.0	71	53.0
K). Population projections	56	56.0	6	42.9	8	40.0	70	52.2
L). Zero population growth	49	49.0	8	57.1	5	25.0	62	46.3
M). Birth Control	38	38.0	7	50.0	6	30.0	51	38.1
N). Age structure	41	41.0	4	28.6	5	25.0	50	37.3
O). Demographic transition	32	32.0	7	50.0	3	15.0	42	31.3
P). Sex-role stereotyping	24	24.0	6	42.9	5	25.0	35	26.1
Q). Geometric growth	24	24.0	3	21.4	3	15.0	30	22.4
R). None of these	1	1.0	0	0.0	0	0.0	1	.7
S). Other (Specify)	6	6.0	0	0.0	1	5.0	6	4.5
No Responses	2	----	0	----	0	----	2	----
Totals (Not Appropriate) Mean =	8.84		8.07		7.00		8.49	

Item number on the questionnaire: 13(continued)

"Other" topics or concepts listed by the respondents.

Choices These Respondents Designated	F
a) Death rate data	3
b) City/urban planning	3
c) Family planning	1
d) Effects of ecology	1
e) Animal population cycle	1
f) Life expectancy	1
g) Birth control ('very tactfully')	1
h) Birth control (as an issue not as a focus of instruction)	2

Item number on the questionnaire: 14

Item: Below are listed a number of objectives for teaching units on population education. Check those objectives which most accurately reflect the objectives you use for your unit(s):

Choices Provided the Respondents	Public School F	Public School %	Non-Catholic Private School F	Non-Catholic Private School %	Catholic Private School F	Catholic Private School %	Total All-Respondents F	Total All-Respondents %
A) Studying population as one aspect of the whole environmental crisis situation	74	73.3	6	46.2	11	55.0	91	67.9
B) Identifying and examining characteristics of past, present, and future population growth	66	65.3	5	38.5	10	50.0	81	60.4
C) Identifying and exploring the possible consequences of continued population growth	64	63.4	6	46.2	8	40.0	78	58.2
D) Drawing inferences and formulating hypothesis about human population growth	58	57.4	6	46.2	10	50.0	74	55.2
E) Studying the effects of crowded conditions on individual personality and group behavior	56	55.4	4	30.8	8	40.0	68	50.7
F) Reading and interpreting population data presented in different forms such as statistics, graphs, etc.	54	53.5	4	30.8	6	30.0	64	47.7
G) Identifying and examining the students' roles in the population problems	44	43.6	4	30.8	4	20.0	52	38.8
H) Studying the effects of population growth on internal and international politics, economics,etc.	43	42.6	5	38.5	4	20.0	52	38.8
I) Defining basic demographic terms	39	38.6	5	38.5	3	15.0	47	35.1
J) Examining various actions through which individuals can influence population changes	38	37.6	3	23.1	3	15.0	44	32.8
K) None of the above objectives are used in my classroom	5	5.0	0	0.0	0	0.0	5	3.7
L) Other (specify)	5	5.0	2	15.4	1	5.0	8	6.0
No Responses	1	----	1	----	0	----	2	----
Totals (Not Appropriate)								

Item number on the questionnaire: 15

Item: Please indicate which of the following films you have used in the course you presently teach:

Choices Provided the Respondents	Public School	Non-Catholic School	Catholic School	Total All-Respondents
A) Tragedy of the Commons	6	0	0	6
B) "Spaceship Earth" is in Trouble*	5	0	1	6*
C) People, People, and More People*	6	0	0	6*
D) Population and the American Future	4	1	0	5
E) Let's Talk - - - About Population	4	0	0	4
F) "And You Shall Multiply . . . "*	4	0	0	4*
G) World Population	3	0	0	3
H) Sorry, No Vacancy	3	0	0	3
I) The Population Bomb is Ticking Away*	2	0	0	2*
J) Population Education*	2	0	0	2*
K) Come to Florida Before It's Gone	0	0	0	0
Number of No Responses	76	13	19	108

The responses above are ordered according to the frequencies of responses each received.

*These films were fictitious rather than real films. S. Dennis Baker, University of Florida Advanced Graduate Student and an activist in the population education movement on that campus in Gainesville, Florida, selected the names of six films that did exist and five that did not exist in order to determine the 'validity' of these teachers' responses to this item. The names of the films selected were taken from lists of films provided by various population education groups. The invented names were contrived to sound real. What this data says in regards to the 'validity' of the results regarding other items is left to the reader.

Item number on the questionnaire: 16

Item: What types of instructional resources related to population education would you like to see made available for your use?

Choices Provided the Respondents	Public School F	Public School %	Non-Catholic Private School F	Non-Catholic Private School %	Catholic Private School F	Catholic Private School %	Total All-Respondents F	Total All-Respondents %
A). Filmstrips	70	70.0	5	35.7	9	47.4	84	63.2
B). Student workbooks	68	68.0	6	42.9	10	52.6	84	63.2
C). Cassette tapes	61	61.0	8	57.1	10	52.6	79	79.4
D). Super-8 filmloops	56	56.0	1	7.1	4	21.1	61	45.9
E). Visiting lecturers	45	45.0	6	42.9	5	26.3	56	42.1
F). Films/16 mm movies	38	38.0	7	50.0	5	26.3	50	37.6
G). Simulation games	38	38.0	2	14.3	9	47.4	49	36.8
H). Case studies	34	34.0	6	42.9	6	31.6	46	34.6
I). Small paperbacks	33	33.0	4	28.6	8	42.1	45	33.8
J). Materials for slow learners	37	37.0	3	21.4	5	26.3	45	33.8
K). Value sheets	37	37.0	4	28.6	2	10.5	43	32.3
L). Posters	29	29.0	4	28.6	3	15.8	36	27.1
M). A newsletter for teachers	28	28.0	3	21.4	3	15.8	34	25.6
N). Overhead transparencies	29	29.0	1	7.1	3	15.8	33	24.8
O). Textbooks	24	24.0	4	28.6	4	21.1	32	24.1
P). 35mm slides	21	21.0	4	28.6	6	31.6	31	23.3
Q). Bibliographies	14	14.0	2	14.3	0	0.0	16	12.0
R). Other (specify)	14	14.0	4	28.6	2	10.5	20	15.0
No Responses	2	----	0	----	1	----	3	----
Totals(Not Appropriate). Mean =	6.62		5.00		4.84		6.23	

Item number on the questionnaire: 17

Item: Would the availability of the above mentioned items lead you to begin or broaden your teaching of population education?

Choice Provided the Respondent	Public School F	Public School %	Non-Catholic Private School F	Non-Catholic Private School %	Catholic Private School F	Catholic Private School %	Total All-Respondents F	Total All-Respondents %
A). Yes	92	92.0	11	78.6	17	85.0	120	89.6
B). No	8	8.0	3	21.4	3	15.0	14	10.4
No Responses	2	----	0	----	0	----	2	----
Totals	102	100.0	14	100.0	20	100.0	136	100.0

Item number on the questionnaire: 18

Item: To your knowledge have objectives for population education been developed in your school?

Choice Provided the Respondent	Public School F	Public School %	Non-Catholic Private School F	Non-Catholic Private School %	Catholic Private School F	Catholic Private School %	Total All-Respondents F	Total All-Respondents %
A). Yes	91	91.0	9	64.3	15	75.0	115	84.5
B). No	9	9.0	5	35.7	5	25.0	19	15.5
No Responses	2	----	0	----	0	----	2	----
Totals	102	100.0	14	100.0	20	100.0	136	100.0

Item number on the questionnaire: 19

Item: If yes to the above, have you used these objectives in your teaching?

Choices Provided the Respondents	Public School F	Public School %	Non-Catholic Private School F	Non-Catholic Private School %	Catholic Private School F	Catholic Private School %	Total All-Respondents F	Total All-Respondents %
A). Yes*	12	13.2	4	44.4	5	33.3	21	18.3
No Responses*	79	----	5	----	10	----	94	----

*Number of no reponses and percentages were both based upon the number of possible responses that were possible from the "Yes" responses for each category for Number 18. See these data on earlier page.

Item number on the questionnaire: 20

Item: Have you attended a population education workshop?

Choices Provided the Respondents	Public School F	Public School %	Non-Catholic Private School F	Non-Catholic Private School %	Catholic Private School F	Catholic Private School %	Total All-Respondents F	Total All-Respondents %
A). Yes	96	96.0	11	78.6	16	80.0	123	91.8
B). No	4	4.0	3	21.4	4	20.0	11	8.2
No Responses	2	----	0	----	0	----	2	----
Totals	102	100.0	14	100.0	20	100.0	136	100.0

Item number on the questionnaire: 21

Item: If given the opportunity, would you attend such a workshop?

Choice Provided the Respondent	Public School F	Public School %	Non-Catholic Private School F	Non-Catholic Private School %	Catholic Private School F	Catholic Private School %	Total All-Respondents F	Total All-Respondents %
A) Yes	86	84.3	10	83.3	17	85.0	113	84.3
B) No	16	15.7	2	16.7	3	15.0	21	15.7
No Responses	0	----	2	----	0	----	2	----
Totals	102	100.0	14	100.0	20	100.0	136	100.0

Item number on the questionnaire: 22

Item: How many courses pertaining to the study of population education have you taken in college? (If none, write "0".)

Choices Identified by the Respondents	Public School F	Public School %	Non-Catholic Private School F	Non-Catholic Private School %	Catholic Private School F	Catholic Private School %	Total All-Respondents F	Total All-Respondents %
A). No courses in college	54	79.4	5	62.5	11	68.8	70	76.1
B). One course	5	7.4	0	0.0	2	12.5	7	7.6
C). Two courses	8	11.8	1	12.5	3	18.8	12	13.0
D). Three courses	1	1.5	0	0.0	0	0.0	1	1.1
E). Eight courses	0	0.0	1	12.5	0	0.0	1	1.1
F). Ten courses	0	0.0	1	12.5	0	0.0	1	1.1
No Responses	34	----	1	----	2	----	37	----
Indicated Not Applicable	0	----	5	----	2	----	7	----
Totals	102	100.1	14	100.0	20	100.1	136	100.0

Item number on the questionnaire: 23

Item: Do you consider it important to include population education in the school curriculum?

Choices Provided the Respondents	Public School F	Public School %	Non-Catholic Private School F	Non-Catholic Private School %	Catholic Private School F	Catholic Private School %	Total All-Respondents F	Total All-Respondents %
A) Yes	92	92.0	10	71.4	17	85.0	119	88.8
B) No	8	8.0	4	28.6	3	15.0	15	11.2
No Responses	2	----	0	----	0	----	2	----
Totals	102	100.0	14	100.0	20	100.0	136	100.0

Item number on the questionnaire: Comments

Item: Comments: Additional Comments on the Population Education Questionnaire.

Code No.	Remarks
004	This is just the second year I've taught a semester course in Ecology and have had little luck finding a text written especially for average high school level students. I think it is one of the most "NOW!" courses offered by our science department. (I'm a Biology teacher).
008	This is a very serious world-wide problem and I personally consider its importance to be paramount. There are so many severe biological and psychological problems that could result if we don't wake up on this issue.
009	Population education is a must in Social Studies and Science. When either one of these fields are discussed in class always the questions of 'population' comes across and any smart or concerned teacher must follow through.
014	I believe workshops would be valuable in making social studies and science teachers more aware of objectives, materials, etc.
015	None dealing specifically with population education but as a part of degree programs 30 years ago. Some up-dating over the interim. [A continuation of remark regarding number of courses in population education taken in college.]
018	Social problems "brought on" by large populations are not actually the result of the large population. All these problems, including living space, existed before World War II. The increased population in urban areas and suburban areas are forcing people to do something about these problems. People need to learn to live at peace with themselves and others. Concentrating on reducing the number of humans may further reduce the value placed on human life. What is the philosophy behind this questionnaire? The formulating of questions 14 & 15 seem to hint at a certain bias.
020	We cover population when, where, and as needed. Have no population unit as such. But not to advocate birth control as such ---
023	All students are exposed to this concept [population education] during the year.
024	The social studies department would be very interested in securing additional information on the topic of population.
028	This survey was filled out with the help of the curriculum assistant because we do not have a well-developed unit in this area; however, I know that the subject should be taught in social studies, home economics, and science.
031	Population education can be discussed in practically all subject matter areas.
036	I would be interested in developing our curriculum on population education but I need teaching aids; since I am in a private school, funds are limited; any suggestions????? I hope my information has been of some help to you.

Item: Comments (Continued)

040	Population control will solve more problems than any other one project.
041	I can see a tremendous need for such information to be taught. In my opinion, this could be correlated with, say, social studies with very little effort. I do see a need for extra funding provisions to be made. For too many programs (new) have been added and no provisions made to fund the same(e.g., Drug abuse, Americanism vs. Communism, etc.).
042	Population education in grades 6,7, 8 seems best suited to U.S. history tied in with units on graphs and maps.
045	This course of study is of major importance.
046	[Item] 23. Qualified; not as another course but certain aspects of it.
047	I work with my students on this topic for 2 or 3 weeks. I try to stimulate their interest by asking and answering questions interesting to them. I feel it is most important to our society to include this in our curriculum.
053	A course will be vital with a changing population.
055	Perhaps two questionnaires would have been better -- one for principals and one for teachers.
056	Population education in our department centers around problems of the environment and problems in the area of international relations which are connected with areas of the world which are over-populated.
058	Over-population and its cause and effect on pollution of all types (land, air, noise, water) should be a part of all state-wide Biology courses during a study of ecology and animal and plant interrelationships.
060	Would appreciate any instructional resources you can provide.
066	On junior high school level population educational concepts need to be introduced with a more comprehensive follow-up program in the senior high school.
067	Not as an entire course, or even as an entire unit. However, there is a definite place in above mentioned courses for this topic. It can be worked into broader units very effectively and this we are trying to do. We can use visual aid materials since funds for social studies visual aids expenditures are <u>very low</u> at this school (county policy).
070	This should be included in all American History classes since these are the ones required of all students. Why not replace required Americanism vs. Communism with Population Education?!?
073	Not as a course by itself. Should be included in almost all courses.
074	A difficult questionnaire when an administrator is involved in expanding a curriculum and fighting a 5-period day brought on by the <u>FTE</u> financing in Florida!
078	Population education is of vital importance. It should be taught in every school system.
080	There is a need for this course in our curriculum. However, there is priority for basic skills development in reading, math, social studies, science, and vocational career education.

083	At the level of students taught at SCDS it would be important to include in sex education and in social studies. As of now we have no such formal program.
093	Population education is important so long as it is placed in a logical perspectives, e.g., to include refraining from the 'people on top of one another' myth being expoused as "just around the corner."
097	Worked with planned parenthood after college for two years.
	Many of our social studies and science courses deal with the population problem. I would be interested in any materials or programs you might be familiar with in teaching about population. In my classes I did not teach a specific unit on population, but only brought in the concepts where applicable. All the objectives [you] cited good -
100	We just cover it in regard to Darwinism and evolution. Where can those films be obtained from? In item #6 on the first page population is not covered enough!
101	The only way to make people aware of population problems is to present this generation with facts and alternatives.
102	Our major stress on population education is in a required course for seniors. We have a unit book, Population and Survival by Prentice-Hall, which is excellent. Population education is dealt with as it pertains to Florida in our seventh grade Florida studies. Here we use Ed Fernald's Florida: Its Problems and Prospects. In the geography classes we look at population as its rapid growth present challenges for survival. The World Today (Kohn and Drummond) and HSGP Unit II: Manufacturing and Agriculture are our basic materials. Where can we obtain any of the films listed on page 3?
104	This is extremely timely and important for the urban school systems in Florida. Although we spent 7 or 8 days on the topic at a NSF institute on the HSGP materials at Cal Poly in California (this was not a workshop on population education).
109	We would be happy to use materials made available to us. At present we may not borrow films from the county library. [This respondent was from a private school.]
111	As the "Gold Coast" (Palm Beach, Broward, and Dade counties) continues to grow, our problems will increase. We at J.D. feel we have to begin now to help prepare our students for their role in a changing society.
112	All environmental problems stem from man. The greater the population, the greater the density, the worse the disruption and degradation of our life. I'm intrigued by what you're doing and wonder what the results will show. Orange County is very conservative -- to the point where the media center won't purchase or order Tragedy of the Commons.
117	Not as a separate course only in relation to geography, science, and economics. I visualize the students knowing and learning data but not being able to associate it geographically (topic 'g'). Population education could prove to be very dull as an elective in either middle or high school. I think most of the texts have incorporated it very well and a good teacher can expand on it.

Item: Comments (Continued)

130	I am most interested in the subject including incorporation in my course, workshops, and courses to take in college!!
132	I would attend a workshop if it fits into my schedule. Many courses offered at the college level include population education. This is especially true of Sociology courses.
133	When you say included in the curriculum that can only mean one thing-- another course-- which means that more of a problem reaching my primary goal-- U.S. History. As long as it is included within U.S. history we might get to it- but getting the students to have just a general knowledge of the Civil War is difficult enough without adding one more objective or course to the curriculum.
134	Not to the extent of treating it as an individual unit of study by itself. I think to incorporate it into the overall study of the political, social and economic development in the social studies curriculum is sufficient. I'm speaking for 6,7, & 8th grade levels.

Materials included within []s were added by this author. Otherwise all comments above were word-for-word as put down by the respective respondents.

APPENDIX B

INTRODUCTORY LETTER

AND

QUESTIONNAIRE

P. K. YONGE LABORATORY SCHOOL

COLLEGE OF EDUCATION
UNIVERSITY OF FLORIDA, GAINESVILLE 32611

April 22, 1974

Dear Principal:

Information to be gleaned from the attached questionnaire is being sought cooperatively by staff of the Population Institute, Washington, D.C., and the University of Florida's Department of Secondary Education and P.K. Yonge Laboratory School. The purpose is to determine the status of instruction relative to population in the State of Florida.

The results of the questionnaire will be analyzed and reported in a monograph available to educational leaders throughout the State. It is anticipated that the status report will provide direction for efforts in instructional planning relative to this universally major concern.

Your cooperation in seeing that the questionnaire is completed by a teacher whom you feel is most likely teaching population education will insure that the final status report will, indeed, be representative of instruction in the State. Aspects may be being taught in a number of courses or curriculum areas in your school; e.g., environmental education, biology, sociology, or home economics. Insofar as is possible, the teacher responsible for completing the questionnaire should record that which is occurring anywhere in the curriculum as well as in his own classes.

The enclosed, self-addressed stamped envelope is for your convenience. Return of the questionnaire by May 15 is requested.

Appreciatively,

Dennis Baker

Dennis Baker, Coordinator,
Status Survey of Population Education

QUESTIONNAIRE ON POPULATION EDUCATION

Name: _____
(LAST) (FIRST) (MIDDLE INITIAL)

Position: _____ School: _____

School Address: _____

City: _____ County: _____ Zip Code: _____

1. Circle the grades included in your school: 4 5 6 7 8 9 10 11 12

2. Indicate the appropriate classification of your school:

___ a) public ___ b) private (non-religious)

___ c) parochial ___ d) military academy ___ e) other (specify) _____

3. Indicate the size of the school's enrollment (grades 5 and above)

___ a) less than 250 ___ b) 251-500 ___ c) 501-1000

___ d) 1001-1500 ___ e) 1501-2500 ___ f) more than 2500

4. Indicate the most appropriate description of the area which your school serves:

___ a) urban ___ b) rural ___ c) suburban

****

*5. Is population education included in any aspect of your school's curriculum?

___ a) yes ___ b) no Remarks _____

6. In which of the following courses are aspects of population education included:

___ a) Biology
___ b) General Science
___ c) Problems of Democracy
___ d) Marriage and the Family
___ e) Home Economics
___ f) World History
___ g) Contemporary Issues
___ h) Other (specify) _____

7. In which department in your school would you expect population education to be taught?

___ a) Social Studies
___ b) Science
___ c) Home Economics
___ d) Physical Education
___ e) Health Education
___ f) Other (specify) _____

* For the purposes of this questionnaire, *population education* is defined as learning to identify changing population phenomena and to recognize their many implications.

8. If you have included population education concepts in the course you are presently teaching, please indicate the approximate length of time spent on the topic?

___ a) one day
___ b) less than a week
___ c) 1 week
___ d) 1 month
___ e) 9 weeks
___ f) other (specify)_____

9. Is population education included primarily in elective or required courses?

___ a) elective courses ___ b) required courses ___ c) both

10. Do you presently include population education in a course you teach?

___ a) yes ___ b) no

11. Please indicate the number of students enrolled in the course or courses in which you teach population education.

Number_____ Not applicable (if #10 is "No")_____

12. Name of course you presently teach_____

13. Below are listed a number of topics and concepts which are ususally included in the study of population. Please indicate those topics and concepts which are discussed in your classroom:

___ a) birth rate
___ b) census
___ c) age structure
___ d) birth control
___ e) effects of crowding
___ f) population projections
___ g) demographic transition
___ h) immigration
___ i) Florida's population
___ j) population and economics
___ k) growth rate
___ l) zero population growth
___ m) population distribution
___ n) population and environment
___ o) sex role stereotyping
___ p) geometric growth
___ q) population explosion
___ r) none
___ s) other (specify)_____
_____
_____

14. Below are a number of objectives for teaching units on population education. Check those objectives which most accurately reflect the objectives you use for your unit(s):

To engage students in:

___ a) defining basic demographic terms.
___ b) identifying and examining characteristics of past, present and future population growth.
___ c) reading and interpreting population data presented in different forms such as statistics, graphs, etc.
___ d) drawing inferences and formulating hypotheses about human population growth.

___ e) studying population as one aspect of the whole environmental crisis situation.
___ f) identifying and exploring the possible consequence of continued population growth.
___ g) identifying and examining the student's role in the population problem.
___ h) studying the effects of population growth on internal and international politics, economics, etc.
___ i) studying the effects of crowded conditions on individual personality and group behavior.
___ j) examining various actions through which individuals can influence population changes.
___ k) other_____
___ l) none of the above objectives are used in my classroom.

15. Please indicate which of the following films you have used in the course you presently teach.

___ None of the films below are used in my classroom.	Obtained From County School System	Obtained From Another Source
___ a) Population & the Am. Future	___	___
___ b) The Population Bomb is Ticking Away	___	___
___ c) Tragedy of the Commons	___	___
___ d) World Population	___	___
___ e) "And you shall multiply....."	___	___
___ f) Population Education	___	___
___ g) "Spaceship Earth" Is in Trouble	___	___
___ h) Sorry, No Vacancy	___	___
___ i) Let's Talk---About Population	___	___
___ j) People, People, and More People	___	___
___ k) Come To Florida Before Its Gone	___	___

16. What types of instructional resources relating to population education would you like to see made available for your use?

___ a) film strips
___ b) cassette tapes
___ c) simulation games
___ d) value sheets
___ e) text books
___ f) a newsletter for teachers
___ g) case studies
___ h) slides (35 mm)
___ i) posters
___ j) visiting lecturer
___ k) films
___ l) student workbooks
___ m) overhead transparencies
___ n) small paperbacks
___ o) materials for slow learners
___ p) super 8 loop films
___ q) bibliographies
___ r) other (specify)_____

17. Would the availability of the above marked items lead you to begin or broaden your teaching of population education?

_____ a) yes _____ b) no

18. To your knowledge have objectives for population education been developed in your county?

_____ a) yes _____ b) no

19. Have you used the objectives in your teaching? (Answer if #18 is "yes.")

_____ a) yes _____ b) no

20. Have you attended a population education workshop?

_____ a) yes _____ b) no

21. If given the opportunity, would you attend such a workshop?

_____ a) yes _____ b) no

22. How many courses pertaining to the study of population education have you taken in college?

_____ courses (if none, write 0)

23. Do you consider it important to include population education in the school curriculum?

_____ a) yes _____ b) no

Comments:

_____

_____

_____

_____

_____